CHAPTER 3.0 CURRENT SOCIOECONOMIC AND PHYSICAL CONDITIONS

This chapter reviews the current socioeconomic and physical environment of the study area. The first section discusses the socioeconomic environment and is followed by a section on demographic and environmental justice considerations. The final section provides a summary of the physical considerations and potential constraints found within the study area.

3.1 SOCIOECONOMIC ENVIRONMENT

3.1.1 Land Ownership and Jurisdictional Boundaries

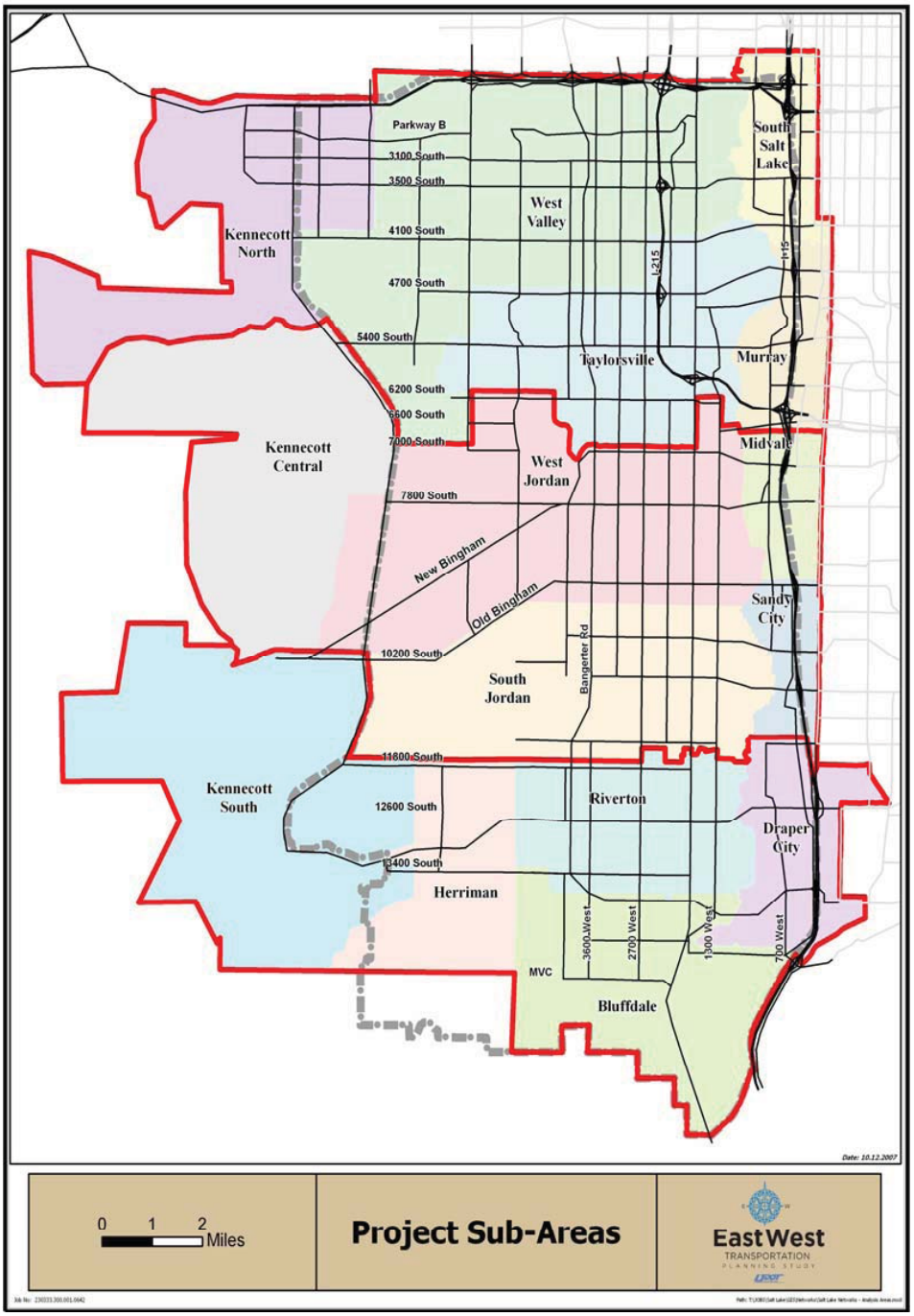
With the exception of the area west of SR 111, most of the land in the study area has been annexed into jurisdictional boundaries. Exceptions are the townships of Magna and Kearns, which are under Salt Lake County jurisdiction. Figure 3-1 presents an overview of the jurisdictional boundaries. As illustrated in Figure 3-1, the boundaries of some jurisdictions are not located entirely within the study area. In such instances, data for this study was only collected for the portion of the jurisdiction located within the boundary of the study area.

3.1.1.1 Kennecott Land Development

Kennecott Land owns 93,000 acres along the Oquirrh Mountains and foothills, 80,000 of which are located on the west bench of the Salt Lake Valley. Kennecott Land's landholding runs from the foothills of the Oquirrh Mountains to their peaks, and from the south at the Bingham Mine north to the Great Salt Lake. This land constitutes 53 percent of the land available for development in the Salt Lake Valley. Kennecott Land is planning for the eventual transformation of this private landholding into new communities and open spaces over the next 50 to 75 years.

Kennecott Land's planning vision is that the area will be developed into new communities oriented around a variety of employment centers offering a mix of office, retail, and other commercial uses, all of which would proactively address public transit and open space preservation. Through a series of planning summits sponsored by the Salt Lake County Council of Governments, more than 100 community leaders, Kennecott Land, and Salt Lake County worked to develop a list of 12 planning principles to be applied to the West Bench Plan. These principles include:

Figure 3-1. Jurisdictional Boundaries



- Plan for transportation options.
- Preserve and enhance open space.
- Respect the landscape.
- Demonstrate environmental responsibility.
- Implement watershed management and water conservation measures.
- Provide for schools and educational opportunities.
- Create economic opportunities.
- Focus on sustainability.
- Utilize and optimize existing infrastructure.
- Build a sense of community and place.
- Design for social equity and diversity.
- Design for public safety and health.

Daybreak, located in South Jordan on approximately 4,100 acres, is the first development node that Kennecott Land has initiated. Once completed, Daybreak is projected to have a total of 13,500 homes situated around retail, office parks, light rail access, and up to 1,000 acres of parks and open space.

3.1.1.2 Northwest Quadrant

The Northwest Quadrant is an area of land owned by the Church of Latter Day Saints, located west of the Salt Lake City International Airport from approximately 2100 South to 2700 North. Growth projections for this area estimate that nearly 500,000 new residents would be eventually located in this area over the next 80 years. While the Northwest Quadrant is located outside the study area, this type of development and population increase would likely have an impact on the traffic patterns in the study area. However, since no current concrete data is available to better estimate growth, no socioeconomic modifications were made to the WFRC projections for that area and none were assumed for this study.

3.1.1.3 Alliance Technology Area

Alliance Technology Area is located between 4100 South and 5400 South immediately east of SR 111. The land is under a lease that will expire in approximately 15 years. At the time of this study, no information was available regarding potential future land developments other than the current land use. Therefore, it was assumed that this land would maintain its current land use characteristics.

3.2 Demographic and Environmental Justice Considerations

3.2.1 Population

Table 3-1 presents population data for the study area in the last five years. As shown in the table, the pace of growth between 2000 and 2005 was significantly higher in the study area than growth in the Wasatch Front Regional Council (WFRC) planning area as a whole.

Table 3-1. Changes in Population

	2000	2005	% Change
Study Area	387,895	455,972	17.55%
WFRC	1,702,450	1,836,513	7.87%

Source, *Census 2000* Redistricting Data (P.L. 94-171) Summary File
WFRC 2005 Estimates

Figure 3-2 and Figure 3-3 show the total population and the total employment densities in the study area for 2005. The most populated areas are located in the northern portion of the study area, while the least populated areas are found in the southern portion. Employment trends parallel that of population trends, with the largest concentration in the northern portion and along the major arterials and interstate routes.

3.2.1.1 Title VI and Environmental Justice Considerations

This section presents information on specific population segments, including minorities, age, sex, mobility-limited, and below-poverty level. Title VI of the Civil Rights Act of 1964 and related statutes ensure that individuals are not discriminated against based on race, color, national origin, age, sex, or disability. Executive Order 12898 on Environmental Justice dictates that any programs, policies, or activities to be implemented are not to have disproportionately high adverse human health and environmental effects on minority populations.

In keeping with Environmental Justice policies, it is imperative that any proposed transportation improvements identified in this study do not adversely impact these groups disproportionately. In addition, to assure that these policies are adhered to, a variety of possible alternatives were developed and considered in order to make sure all groups are fairly represented in the amount and type of transportation services provided.

Figure 3-2. 2005 Population Density

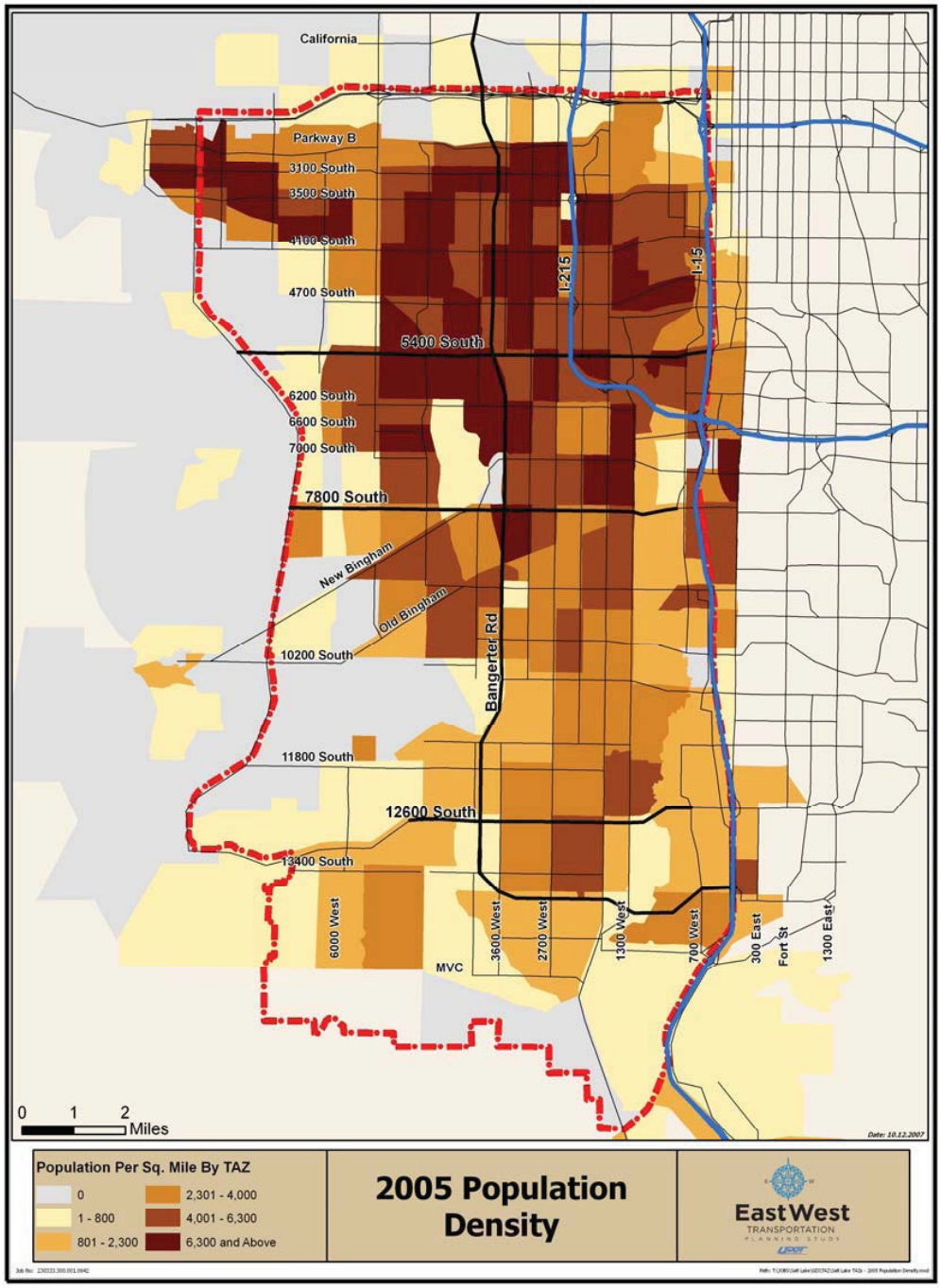
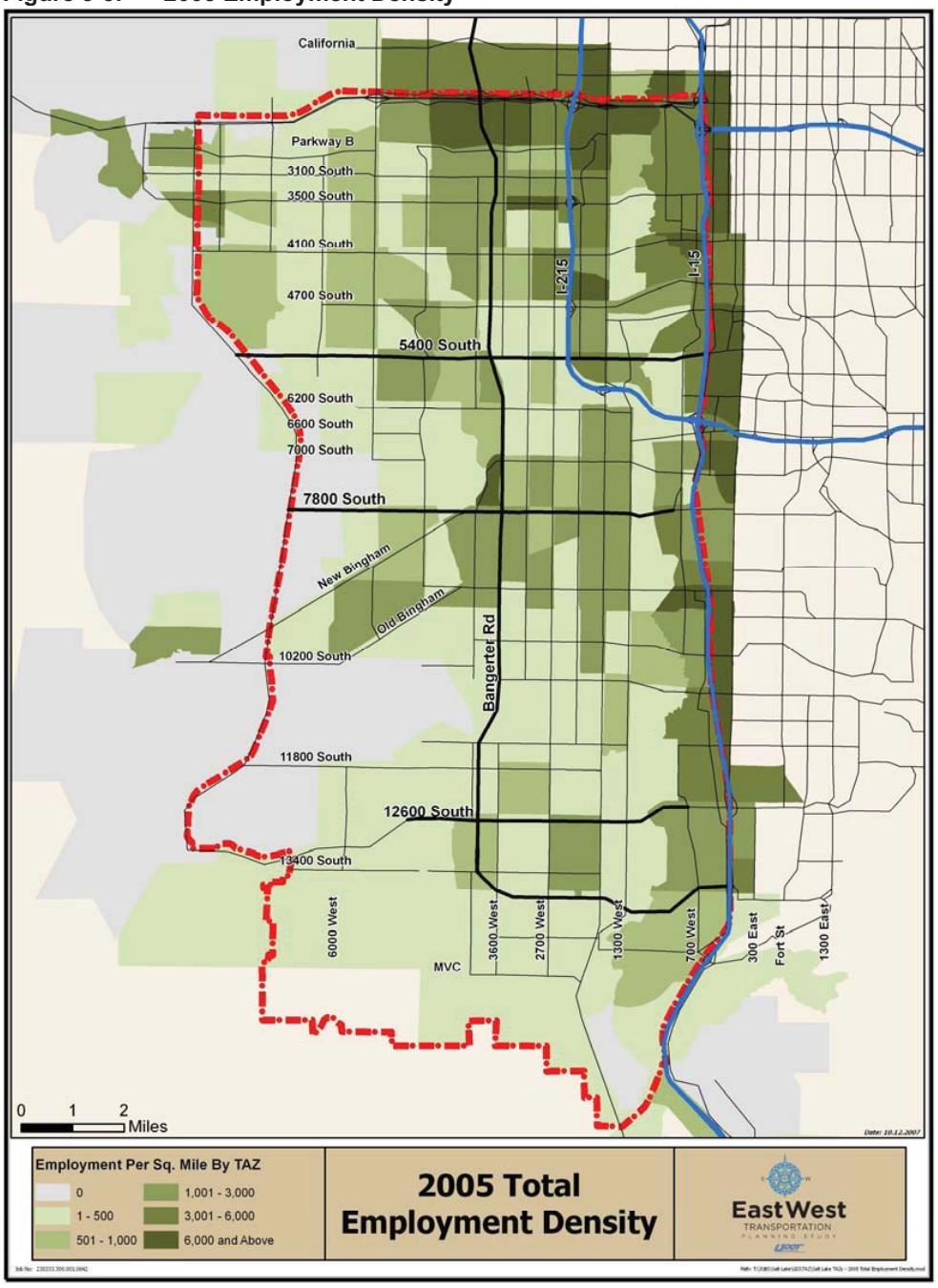


Figure 3-3. 2005 Employment Density



3.2.1.2 Minority Population

According to *Census 2000*, the population in Utah was an estimated 2.2 million, of which approximately 898,387, or 40 percent, resided in Salt Lake County. In the study area, 20 percent of the total population comprises minorities (see Table 3-2). In comparison to the total population, the percentage of the minority population in Salt Lake County and the State of Utah was 19 and 15 percent, respectively.

Table 3-2. Minority Population

	East-West Planning Area	Salt Lake County	Utah
Total Population	***387,895***	***898,387***	***2,233,169***
Total Minority	***79,931***	***171,190***	***328,904***
Hispanic or Latino	51,810	106,787	201,559
Black or African American	3,100	8,501	16,137
American Indian and Alaska Native	2,812	6,487	26,663
Asian	9,473	22,716	36,483
Native Hawaiian and Other Pacific Islander	6,247	10,865	14,806
Some Other Race	322	912	1,948
2 or More Race	6,167	14,922	31,308

Source: *Census 2000*, SF 1

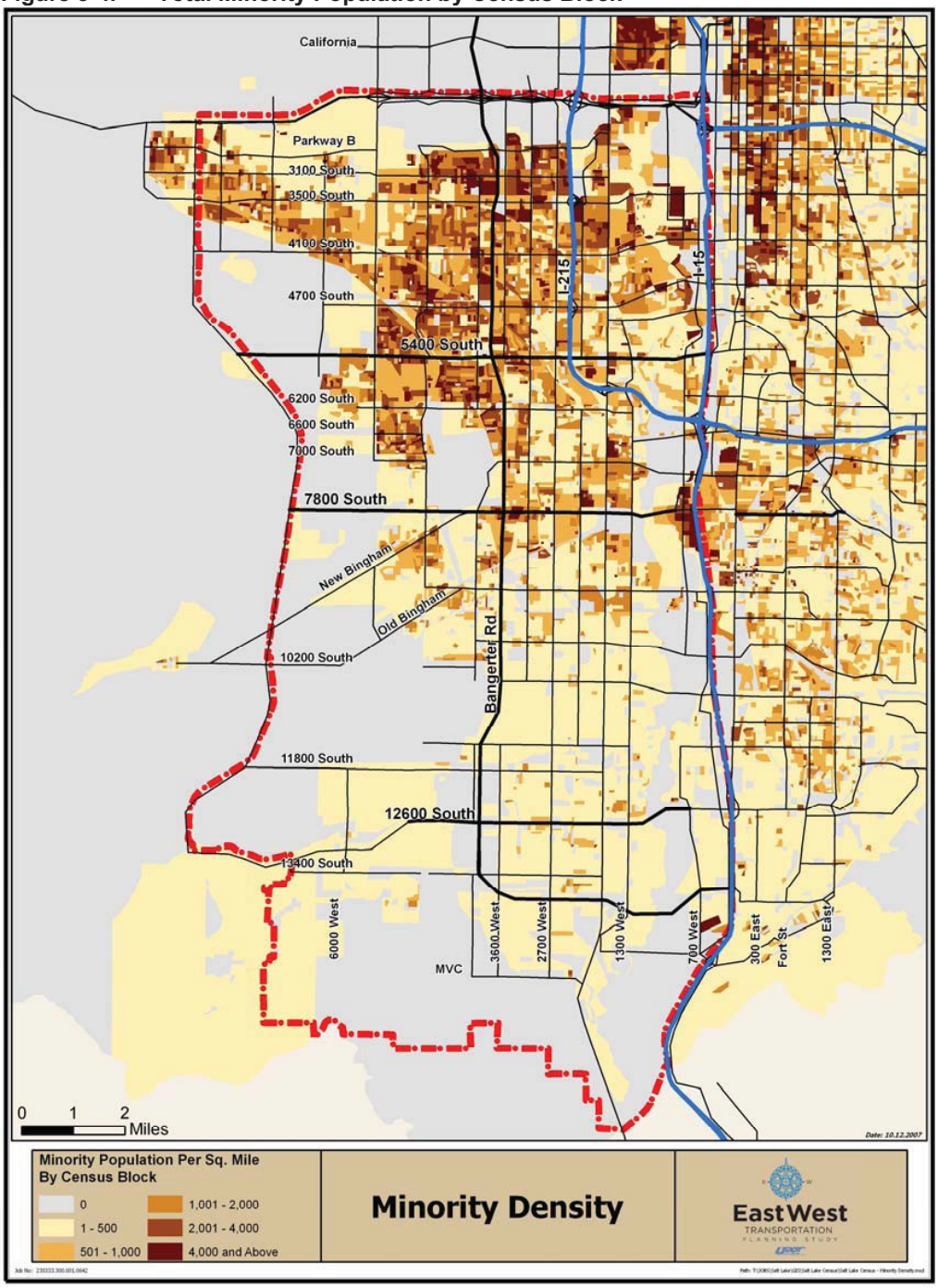
The minority percentage located within the study area is higher than both county and state minority percentages. Within the study area, the highest minority group represented is the Hispanic or Latino race, which accounts for 13 percent of the total population, while Asians account for 2 percent of the population.

Figure 3-4 displays the minority population densities for the study area. It was observed that:

- Higher densities of the minority population resided in the northern portion of the study area (north of 7800 South), with higher densities in the vicinity of 5400 South and Bangerter Road.

- Few minorities live in the southern portion of the study area, which is reflected in the sporadic distribution of minority densities.

Figure 3-4. Total Minority Population by Census Block



3.2.1.3 Mobility-Limited Population (Ages 16 to 64)

The mobility-limited population includes disabled or impaired persons. Within the study area, the mobility-limited population accounts for 10 percent of the total population. This percentage is slightly higher than the state as a whole, yet equivalent to the county's percentage (see Table 3-3).

Table 3-3. Mobility-Limited Population (Ages 16 to 64)

	East-West Planning Area	Salt Lake County	Utah
Total Population	390,990	898,387	2,233,169
Total Mobility Limited	41,121	93,765	203,442

Source: *Census 2000*, SF

Figure 3-5 displays the mobility-limited population densities for the study area. It was found that:

- The majority of the mobility-limited population is located in the northern portion of the study area (north of 7800 South Street); higher densities are in the vicinity of 5400 South, Bangerter Road, and I-215.
- In the southern portion of the study area, the mobility-limited population was significantly less that the northern portion, and is primarily located within the area enclosed by 7800 South, Bangerter Road, and I-15.

3.2.1.4 Below-Poverty Population

In 2000, the below-poverty percentage in the study area accounted for 6 percent of the total population. This percentage is less than both the county and state percentages (see Table 3-4).

Table 3-4. Below-Poverty Population

	East-West Planning Area	Salt Lake County	Utah
Total Population	390,990	898,387	2,233,169
Total Below Poverty	24,837	70,714	206,328

Source: *Census 2000*, SF 3

Figure 3-5. Mobility-Limited Population Densities

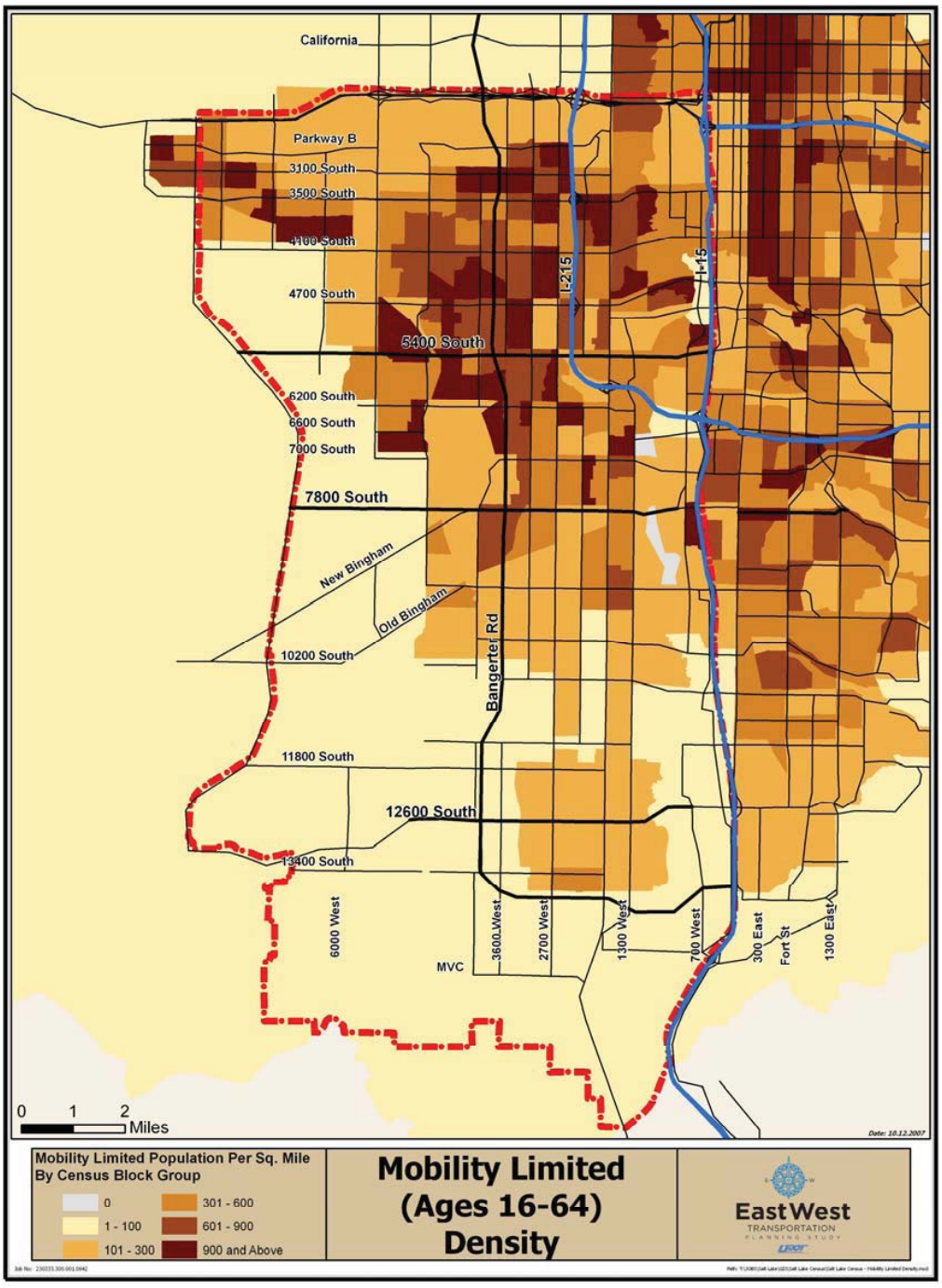
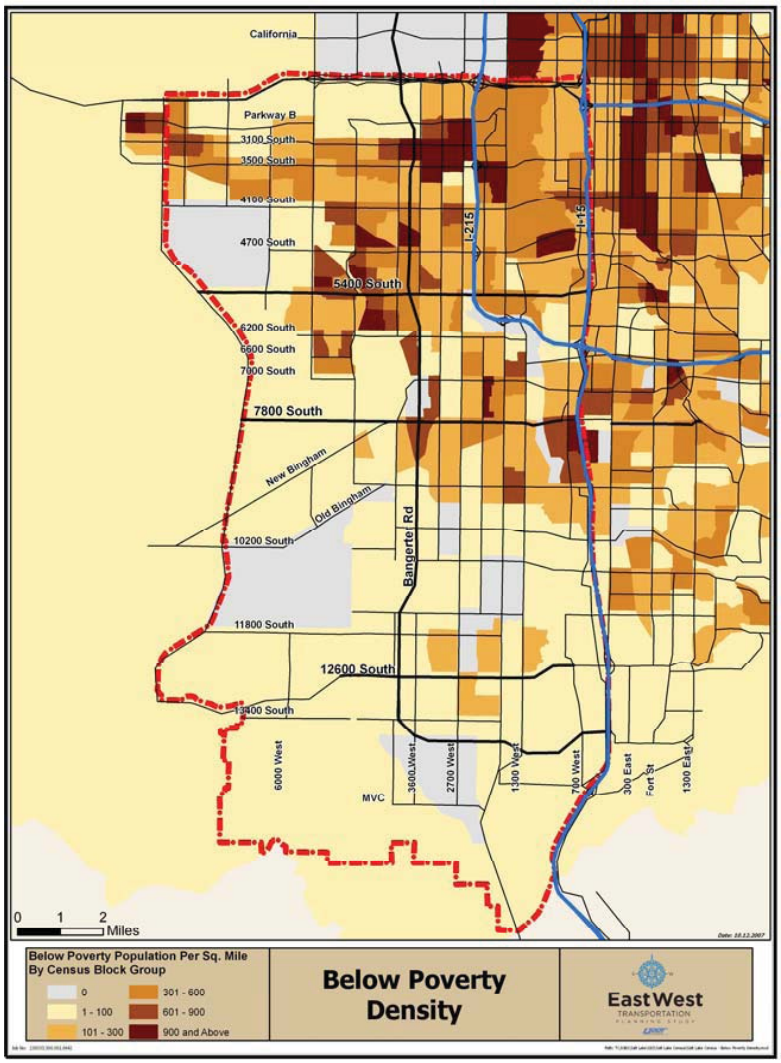


Figure 3-6 displays the below-poverty population densities for the study area. It was found that:

- The majority of the below-poverty population resides within an area enclosed by 6000 West and 9000 South, with higher densities located within the vicinity of 5400 South, Bangerter Road, and I-215.
- Lower densities of the below-poverty population are located in the western and southern portion of the study area, with the exception of the area located in the vicinity of 12600 South and 2700 West.

Figure 3-6. Below-Poverty Population Densities



3.3 PHYSICAL CHARACTERISTICS OF THE STUDY AREA

3.3.1 Topography and Soils Classification

The topography throughout the study area is relatively flat, with a gradual slope occurring from west to east. The average eastward slope ranges from 100 feet to 500 feet from SR 111 to the Jordan River.

3.3.2 Wildlife and Natural Vegetation

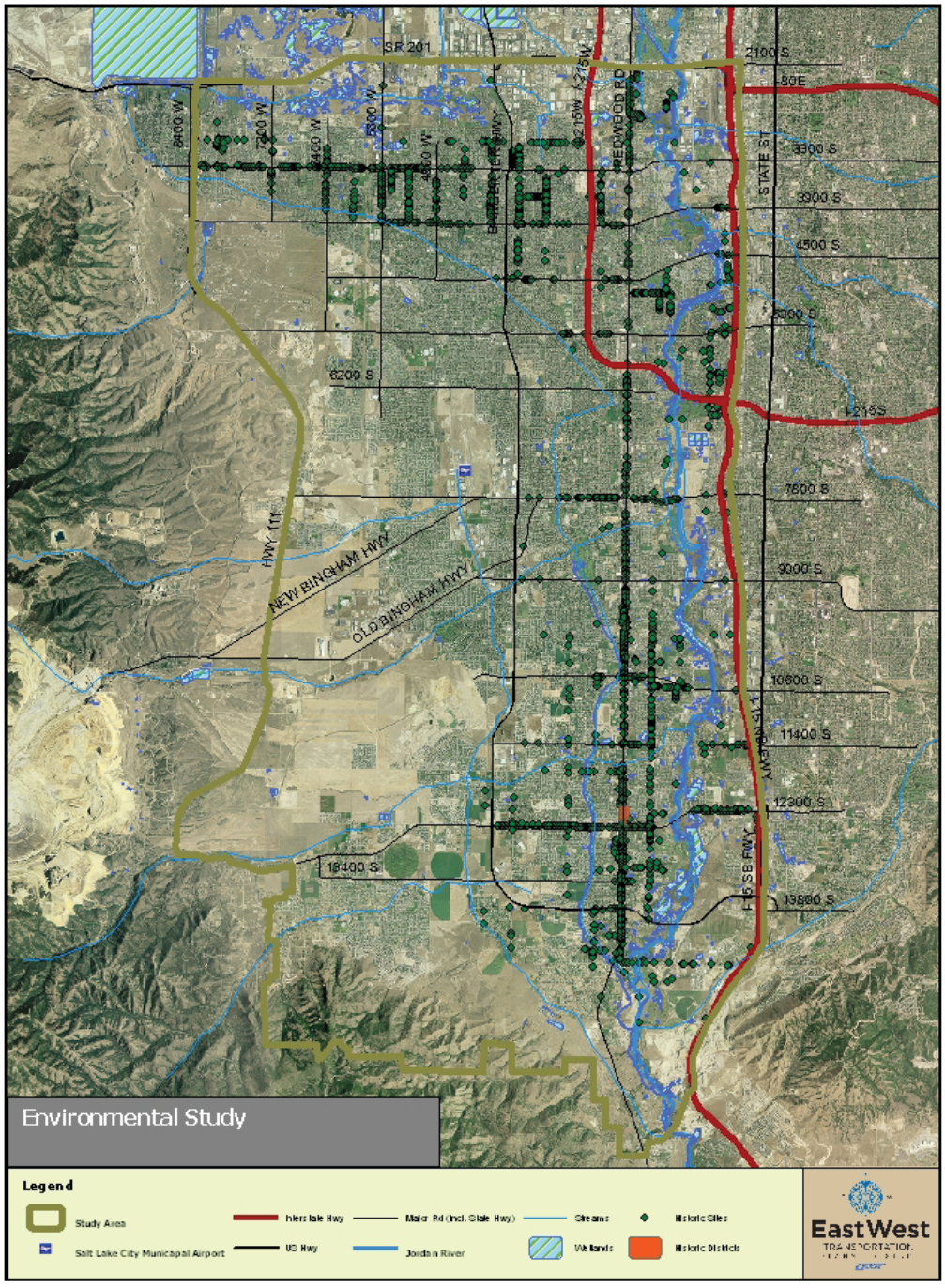
3.3.2.1 Wildlife

There are a few site-specific locations located within the study area that likely harbor wildlife on a regular or seasonal basis. Those include the Jordan River and the riparian areas located along the Jordan River, along the I-80 corridor to the north, and in the open areas located in the western and southern portion of the study area, as shown in Figure 3-7. However, because the majority of the study area is developed, opportunities for quality habitat are limited. Microhabitat interconnectivity of metapopulations and wildlife use corridors are less likely within the study area, with the exception of the Jordan River corridor. A greater chance of habitat exists in the wetlands in the northern portion of the study area in the vicinity of the Great Salt Lake (GSL) floodplain.

Along the river corridor where the river banks are open, it is likely that small urban-tolerant mammal species, such as the red fox (*Vulpes vulpes*) and raccoon (*Procyon lotor*), would be found. Because the river corridor passes through heavily populated urban areas, it is unlikely it would harbor non-urban wildlife other than migrant avian and aquatic species; however, some sensitive or listed aquatic species are known to exist in the Jordan River drainage area and could be present in the river. These aquatic species may include Bonneville cutthroat trout (*Oncorhynchus clarki utah*) and June sucker (*Chasmistes liorus*).

In those areas where the river bank is heavily developed, the possibility of the corridor being used by wildlife is reduced. Migratory birds identified along the Jordan River include numerous duck species, passerines that include migratory warblers, and shorebirds, such as long-billed curlew (*Numenius americanus*), which is a species of concern. Because the river corridor is generally lined with trees, there is the potential for use by most migratory and non-migratory birds, as well as foraging zones for raptors, such as sharp-shinned hawk (*Accipiter striatus*) and Cooper's hawk (*Accipiter cooperii*). There is a potential that other animal species may occasionally be found along the Jordan River; however, because of the proximity to urban areas and the availability of more open space to the west and north, it is unlikely they would frequent the area.

Figure 3-7. Environmental Conditions



The wetlands located in the northern portion of the study area are likely to have similar wildlife species as those identified along the Jordan River; however, because these lands are less developed than those along the Jordan River the likelihood of their presence is greater. The wetlands and ponds, such as Lee Kay ponds along California Avenue, are frequent migratory bird stopover and rest locations. These areas are heavily used during the spring and fall migration. When water levels are low, there may be foraging opportunities for shorebirds, such as the American Avocet (*Recurvirostra americana*), Black-necked stilt (*Himantopus mexicanus*), white-faced ibis (*Plegadis chihi*), and many types of sandpiper-type shorebirds, such as black bellied plovers (*Pluvialis squatarola*) and long-billed dowitchers (*Limnodromus scolopaceus*). Additionally, the fallow agricultural lands in the southern and western portion of the study area are likely to see an increase in avian species such as bobolink (*Dolichonyx oryzivorus*), a species of concern. In some instances, big game, such as elk (*Cervus canadensis*) and mule deer (*Odocoileus Hemionus*), may migrate down from the Oquirrh Mountains.

3.3.2.2 Vegetation

As with wildlife, natural vegetation located within the study area is limited to a few site-specific locations, including the Jordan River, the associated wetlands along the river and in the northwest, and in some cases in the non-developed areas in the western and southern portion of the study area. In all of these locations, the vegetation is primarily limited to a mix of native and non-native grasses with limited locations of significant native vegetation populations. There is considerable attention and effort by federal and state agencies, as well as local interest groups and local governments, to restore and beautify the Jordan River riparian zones. Much of the funding for these projects comes from Superfund damage settlement monies related to Superfund sites along the Jordan River. Among the objectives of these projects is to restore native vegetation to the corridor and to remove invasive species, such as Russian olive (*Elaeagnus angustifolia*) and tamarisk (*Tamarix sp*).

3.3.3 Archaeological Sites

The greater Salt Lake area is rich in cultural heritage both historic and pre-historic in nature. Exact locations of pre-historic sites are generally not made public; however, it is generally accepted that Utah's history extends as much as 8,000 years prior to now with nomadic tribes frequenting the valley. These tribes included the Anasazi, Paiute, Shoshone, and Ute, for which the state was named. Remnants of these historic peoples can be found throughout the state, including the greater Salt Lake area.

3.3.4 Drainage and Hydrology

Drainage within the study area is from south to north, from Utah Lake to the Great Salt Lake. This drainage occurs primarily in the Jordan River corridor and with collector streams draining the Wasatch and Oquirrh Mountains. Recharge is generally from snow

pack accumulation within the Wasatch and Oquirrh Mountains, as well as from rainfall and the Utah Lake.

3.3.5 Hazardous Sites

Recently, a 17-mile canal that was used in the 1930s to take wastewater from Utah Copper Co. operations at Copperton to an impoundment in Magna was found to contain a high level of arsenic. The ditch, which was filled around 1937, was recently unearthed during development. Recent excavation from development along the ditch right-of-way exposed the contaminated sediment, which was analyzed and found to contain 1,500 to 3,000 million parts per million. The level that is eligible for a federal cleanup is 100 parts per million. Because of the amount of development occurring in the area where the ditch is located, the Environmental Protection Agency (EPA) and the Department of Environmental Quality (DEQ) stated they plan to characterize (scientifically describe) the entire length of the ditch and make sure it does not pose future health threats.

Locations of potentially hazardous material including Underground Storage Tanks (UST) and Leaking Underground Storage Tanks (LUST) are becoming more frequently documented. There are approximately 1,500 LUST sites and approximately 6,000 UST sites within the study area. The corridor adjacent to I-15 contains a higher percentage of both, with numbers decreasing westward in the valley.

3.3.6 Mining Operations

There are no mining operations located within the study area. However, located to the southwest of the study area is the Kennecott Copper Mine. The copper mine is the world's largest human-made excavation and first open pit. While no direct impacts to traffic patterns are likely to occur from the mine within the study area, indirect impacts may occur from freight traffic associated with the mine.